

**Lists**

HTML can have Unordered Lists, Ordered Lists, or Description Lists:

|  |  |  |  |
| --- | --- | --- | --- |
|  | Unordered HTML List   * The first item * The second item * The third item * The fourth item | Ordered HTML List   1. The first item 2. The second item 3. The third item 4. The fourth item | HTML Description List  The first item  Description of item  The second item  Description of item |

**Unordered HTML Lists**

An unordered list starts with the **<ul>** tag. Each list item starts with the **<li>** tag.

The list items will be marked with bullets (small black circles).

**Unordered List:**

<ul>  
  <li>Coffee</li>  
  <li>Tea</li>  
  <li>Milk</li>  
</ul>

**Results below**

* Coffee
* Tea
* Milk

**Unordered HTML Lists - The Style Attribute**

A **style** attribute can be added to an unordered list, to define the **style** of the marker:

|  |  |
| --- | --- |
| **Style** | **Description** |
| list-style-type:disc | The list items will be marked with bullets (default) |
| list-style-type:circle | The list items will be marked with circles |
| list-style-type:square | The list items will be marked with squares |
| list-style-type:none | The list items will not be marked |

**Lab 1**

* 1. **Create the following HTML document**
  2. **Add the code between the <body> and </body> tags**
  3. **Save and view**

<ul style="list-style-type:disc">  
  <li>Coffee</li>  
  <li>Tea</li>  
  <li>Milk</li>  
</ul>

<ul style="list-style-type:circle">  
  <li>Coffee</li>  
  <li>Tea</li>  
  <li>Milk</li>  
</ul>

<ul style="list-style-type:square">  
  <li>Coffee</li>  
  <li>Tea</li>  
  <li>Milk</li>  
</ul>

<ul style="list-style-type:none">  
  <li>Coffee</li>  
  <li>Tea</li>  
  <li>Milk</li>  
</ul>

* 1. **Save and view in different Browsers**

**\*\*\* Note:** Using a type attribute <ul type="disc">, instead of <ul style="list-style-type:disc">, also works. But in HTML5, the type attribute is not valid in unordered lists, only in ordered list.

**Questions:**

1. What did the disc attribute look liked? Is there a browser that gave you a different result?
2. What did the circle attribute look like? Is there a browser that gave you a different result?
3. What did the square attribute look like? Is there a browser that gave you a different result?
4. What did the “none” attribute look like? Is there a browser that gave you a different result?

**Ordered HTML Lists**

An ordered list starts with the **<ol>** tag. Each list item starts with the **<li>** tag.

The list items will be marked with numbers.

**Ordered List:**

<ol>  
  <li>Coffee</li>

<li>Tea</li>  
  <li>Milk</li>  
</ol>

**Results**

1. Coffee
2. Tea
3. Milk

**Ordered HTML Lists - The Type Attribute**

A **type** attribute can be added to an **ordered list**, to define the type of the marker:

|  |  |
| --- | --- |
| **Type** | **Description** |
| type="1" | The list items will be numbered with numbers (default) |
| type="A" | The list items will be numbered with uppercase letters |
| type="a" | The list items will be numbered with lowercase letters |
| type="I" | The list items will be numbered with uppercase roman numbers |
| type="i" | The list items will be numbered with lowercase roman numbers |

**LAB 2**

1. **Create the following HTML document**
2. **Add the code between the <body> and </body> tags**
3. **Save and view**

<ol type="1">  
  <li>Coffee</li>  
  <li>Tea</li>  
  <li>Milk</li>  
</ol>

<ol type="A">  
  <li>Coffee</li>  
  <li>Tea</li>  
  <li>Milk</li>  
</ol>

<ol type="a">  
  <li>Coffee</li>  
  <li>Tea</li>  
  <li>Milk</li>  
</ol>

<ol type="I">  
  <li>Coffee</li>  
  <li>Tea</li>  
  <li>Milk</li>  
</ol>

<ol type="i">  
  <li>Coffee</li>  
  <li>Tea</li>  
  <li>Milk</li>  
</ol>

1. **Save and View in different browsers**

**Questions:**

1. Did it work in all Browsers?
2. What is the default type if no attribute is put in the tag?
3. Can you embed list (Put a list inside a list)? TRY it!

**HTML Description Lists (TRY THE FOLLOWING ON YOUR OWN)**

A description list, is a list of terms, with a description of each term.

The **<dl>** tag defines a description list.

The **<dt>** tag defines the term (name), and the **<dd>** tag defines the data (description).

**Description List:**

<dl>  
  <dt>Coffee</dt>  
  <dd>- black hot drink</dd>  
  <dt>Milk</dt>  
  <dd>- white cold drink</dd>  
</dl>

**Results**

Coffee

- black hot drink

Milk

- white cold drink

**Nested HTML Lists**

List can be nested (lists inside lists).

**Nested Lists:**

<ul>  
  <li>Coffee</li>  
  <li>Tea  
    <ul>  
      <li>Black tea</li>  
      <li>Green tea</li>  
    </ul>  
  </li>  
  <li>Milk</li>  
</ul>

**Result**

* Coffee
* Tea
  + Black tea
  + Green tea
* Milk

**\*\*\* Note:** List items can contain new list, and other HTML elements, like images and links, etc.

**CSS**

**Horizontal Lists**

HTML lists can be styled in many different ways with CSS.

One popular way, is to style a list to display horizontally:

**Horizontal List:**

<!DOCTYPE html>  
<html>  
<head>  
<style>  
ul#menu li {  
    display:inline;  
}  
</style>  
</head>  
<body>  
<h2>Horizontal List</h2>  
<ul id="menu">  
  <li>Apples</li>  
  <li>Bananas</li>  
  <li>Lemons</li>  
  <li>Oranges</li>  
</ul>   
</body>  
</html>

**Results**

**Horizontal List**

Apples Bananas Lemons Oranges

With a little extra style, you can make it look like a menu:

* [Tables](http://www.w3schools.com/html/html_tables.asp)
* [Lists](http://www.w3schools.com/html/html_lists.asp)
* [Blocks](http://www.w3schools.com/html/html_blocks.asp)
* [Classes](http://www.w3schools.com/html/html_classes.asp)

New Style:

ul#menu {  
    padding: 0;  
}  
  
ul#menu li {  
    display: inline;  
}  
  
ul#menu li a {  
    background-color: black;  
    color: white;  
    padding: 10px 20px;  
    text-decoration: none;  
    border-radius: 4px 4px 0 0;  
}  
  
ul#menu li a:hover {  
    background-color: orange;  
}

QUESTIONS:  
Identify the following tags:

1. <ul> -
2. <ol> -
3. <li> -
4. Which tag can you find the tag <li> embedded in? <ol> or <ul>
5. <dd> -
6. <dt> -
7. <dl> -

**Chapter Summary**

* Use the HTML **<ul>** element to define an unordered list
* Use the HTML **style** attribute to define the bullet style
* Use the HTML **<ol>** element to define an ordered list
* Use the HTML **type** attribute to define the numbering type
* Use the HTML **<li>** element to define a list item
* Use the HTML **<dl>** element to define a description list
* Use the HTML **<dt>** element to define the description term
* Use the HTML **<dd>** element to define the description data
* Lists can be nested inside lists
* List items can contain other HTML elements
* Use the CSS property **display:inline** to display a list horizontally